



Determination
Advanced Metering Infrastructure
2015 revised charges

12 December 2014

© Commonwealth of Australia 2014

This work is copyright. Apart from any use permitted by the Copyright Act 1968, no part may be reproduced without permission of the Australian Competition and Consumer Commission. Requests and inquiries concerning reproduction and rights should be addressed to the Director Publishing, Australian Competition and Consumer Commission, GPO Box 3131, Canberra ACT 2601.

Inquiries about this document should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001
Tel: (03) 9290 1444
Fax: (03) 9290 1457
Email: AMlcharges2015@aer.gov.au

AER reference: 54671

Contents

Contents	3
1 Summary	4
2 Background	9
3 2015 charges revision applications	10
3.1 2013 expenditure excess applications.....	10
3.2 Other matters	11
4 Assessment approach	13
4.1 Legislative framework.....	13
4.2 Prudency and efficiency	14
4.3 Assessment approach	15
5 Key findings	19
5.1 Actual 2013 expenditures	19
5.2 Assessment of 2013 expenditure excess applications.....	19
5.3 Amendments to the debt risk premium.....	33
6 Approved metering charges	34
7 Manual meter charge	36
8 Appendix A—relevant legislative requirements	38

1 Summary

The Australian Energy Regulator assessed proposals by five licenced Victorian distribution network service providers (the businesses) to revise their 2015 advanced metering infrastructure charges against the AMI Order in Council provisions (**the Order**).¹ Those businesses—CitiPower, Powercor, Jemena, AusNet Services and United Energy—are responsible for the rollout of smart meters. The Order requires them to use their best endeavours to complete the rollout by December 2013 as part of a State Government mandate.

Unlike previous years, three businesses—Jemena, AusNet Services and United Energy—have applied to include expenditure excesses² and amend their 2015 AMI charges accordingly. CitiPower and Powercor spent less than their 2013 budget and therefore their expenditures do not require further assessment.

This requirement to assess overspends is in line with amendments to the Order gazetted in December 2011. That change requires the AER to assess the prudence and efficiency of any spending that exceeds the 2012–15 Approved Budget for each distributor. We approved expenditure excesses where, and to the extent that, we assessed that they were “prudent” as defined in the Order (see section 4.1 for a description of the prudence test).

Determination of 2013 expenditures

Our decision is to approve the following expenditures:

- \$57.3 million (\$2013) for Jemena
- \$86.9 million (\$2013) for United Energy
- \$154.9 million (\$2013) for AusNet Services.

These approved expenditures have been included in the building block costs for each of the distributors. We consider that many of them were outside the distributors’ control but were incurred prudently and efficiently.

We have not approved some elements of the expenditure in relation to:

- meter hardware and installation capital expenditures
- capex for communication technology that enables meters to be read and communicate back to base
- manual meter reading operating expenditures
- project management office expenditures.

The costs associated with these were not incurred prudently or efficiently, irrespective of whether they were in the businesses’ control or not.

¹ Note that advanced metering infrastructure is often referred to as ‘smart meters’.

² The term “expenditure excess” is defined in clause 51.5 of the Order. That definition is adopted for the purposes of this determination.

Approved 2015 charges

Metering charges in 2015 are calculated by ensuring that the net present value of costs equals the net present value of revenues over the course of the rollout. This means that 2015 charges are derived by taking the actual approved expenditure two years prior (i.e. 2013) and updated estimates for 2014 and 2015 expenditures. These are included in the building block costs. Revenues derived over the same period are aggregated and then a net present value analysis is applied. This process is repeated each year.

Our decision is for the charges set out in Table 1-1 to apply from 1 January to 31 December 2015 (see Table 6-1 for the complete list of each meter type) and is made on the basis of:

- accepting CitiPower and Powercor's proposed charges (but with a slight upward revision on account of amendments to the weighted average cost of capital).
- not accepting Jemena, AusNet Services and United Energy's proposed charges because we have amended the expenditure excess each can include in their building block costs.
- amending the weighted average cost of capital to account for removal of a pair of Coca Cola Amatil bonds, and applying this new return to all five businesses.
- not accepting Jemena's claim for amended debt raising costs and continuing to apply the AER's benchmark instead.
- correcting an error in AusNet Services' charges model.

Table 1-1 Approved 2015 single phase single element meter charges, (\$nominal, excludes GST)

Distributor	Charge
CitiPower	115.90
Powercor	109.40
Jemena	226.32
AusNet Services	205.54
United Energy	154.51

Source: AER analysis.

We have made this decision in line with an amendment to the Order that enabled us to extend the timeframe for making our determination.³

Other matters—manual meter charges

The forecast AMI expenditures did not include costs that relate to manual meter reads. These costs are submitted separately, consistent with a decision made by the Victorian Government. Manual meter fees are being borne only by those customers who have refused a smart meter.⁴ Further, we are satisfied that each distributor has excluded the costs of manual meter reads from its AMI building

³ Advanced Metering Infrastructure Order in Council amendment, gazetted 21 October 2014. The deadline was extended twice, initially to 5 December and then to 12 December 2014.

⁴ The Department of State Development, Business and Innovation (DSDBI), Smart Meters Website, <http://www.smartmeters.vic.gov.au/about-smart-meters/end-of-rollout>, accessed on 18 November 2014.

block costs so that customers with a smart meter are not paying for these manual meter read costs. Therefore, there is no double counting of costs.

With the exception of AusNet Services, all four distributors have proposed manual meter fees to apply from 1 April 2015. Our decision on these charges is set out in Table 1-2. As AusNet Services has not proposed a separate charge, they will bear these costs directly.

Table 1-2 Approved 2015 manual meter charges (\$nominal, per read, excludes GST)

Distributor	Manual meter charge	Approved manual meter charges
CitiPower	Per read	19.44
Powercor	Per read	31.07
Jemena	Per read	10.83
AusNet Services	Not applicable	Not applicable
United Energy	Maximum annual charge for basic meter—quarterly field visit	44.20
United Energy	Maximum annual charge for basic meter—monthly field visit	132.60
United Energy	Maximum annual charge for interval meter—quarterly field visit	49.12
United Energy	Maximum annual charge for interval meter—monthly field visit	147.36

Source: Distributors' submissions and AER analysis.
 Note: Charges apply from 1 April to 31 December 2015.

Material considered in making determinations

We reviewed the 2015 Charges Revision Applications and supporting documents from the five businesses—CitiPower, Powercor, Jemena, AusNet Services and United Energy.

We commissioned Energeia Pty Ltd (Energeia) to provide advice on technical aspects of the expenditure excesses, such as the meter purchase and installation rates. Their advice informed our determination of the prudence and efficiency of the claimed expenditure excesses and therefore the quantum that should be added to the 2013 expenditure building blocks, and hence the 2015 charges.

While Energeia's advice informed our determination, ultimately the AER made its own assessment of the prudence of the expenditure excesses sought by the relevant businesses. We did not agree with Energeia's views in every instance.

We also took into account matters raised in submissions on the proposed 2015 charges and the proposed manual meter fees from the following stakeholders:

- the Victorian Minister for Energy and Resources on the expenditure excesses
- the Consumer Utilities Advocacy Centre and the Consumer Action Law Centre verbally on the expenditure excesses, notably that of AusNet Services

- Simply Energy on the quantum of the distributors' expenditures excess and the prudence of their decision making that led to those additional costs
- Origin Energy on the quantum of the distributors' expenditures excess and the prudence of their decision making that led to those additional costs
- 14 written submissions from the Victorian public on manual meter fee proposals.

Furthermore, we had regard to the Essential Services Commission of Victoria's independent review into the distributors' best endeavours obligations to meet rollout schedules by 31 December 2013.

Energeia provided us with a report (Energeia's 'initial report') setting out its views on the three distributors who had incurred expenditure excesses—Jemena, United Energy and AusNet Services. Energeia's initial report concluded the three had incurred some excess expenditure inefficiently in 2013. We gave Jemena, United Energy and AusNet Services an opportunity to comment on Energeia's initial report. The three distributors disputed Energeia's reasoning and findings. In summary:⁵

- All three called into question Energeia's assessment techniques including its use of benchmarking.
- Jemena and United Energy consider that Energeia had misinterpreted the Order by allegedly not taking into account the circumstances the distributors faced in incurring the 2013 expenditure excesses.
- Jemena and AusNet Services alleged that Energeia made calculation errors in its modelling.

We provided Jemena's, United Energy's and Ausnet Service's comments to Energeia. Energeia revised its report in response to the distributors' comments (Energeia's 'final report').⁶ We considered Energeia's views, and the distributors' comments on them, in making our determination of the efficient 2013 expenditure excesses.

Why do charges differ?

It is evident that while the smart meter in each customer's premises essentially provides the same service (features or capabilities) it is the case that customers pay different charges for the same service depending in which distribution area they reside or carry on business. Our comments here are in response to numerous queries on why charges are not identical and also why it is difficult to compare charges directly in any single period.

- Different profiles of meter charges proposed by each business. For example, CitiPower and Powercor had a relatively flat charging profile over the period. By contrast United Energy had lower charges in the early years but increased them over time and at a much faster rate.
- The Order allowed businesses to choose their own price path during the 2009 to 2015 roll-out years. This has led to differing circumstances in terms of cost impacts from year to year, as discussed above.

⁵ Jemena, letter to the AER dated 26 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment; Jemena, letter to the AER dated 28 November 2014, Jemena 2015 Charges Application –Model Assessment; AusNet Services, letter to the AER dated 27 November 2014, Response to Energeia's report on the 2015 AMI Charges Application; United Energy, letter to the AER dated 28 November 2014, Energeia report, AMI charges revision application 2015.

⁶ Energeia's final report and the appendices to its final report are available on the AER's website at www.aer.gov.au

- Similar circumstances affecting distributors differently. For example, Jemena had a proportionally greater degree of customer refusals during 2013 than its peers. Also, changes in government policy that impacted rollout schedules had a proportionally greater effect on those distributors who had completed fewer meter installs at the time. CitiPower and Powercor who had completed more of their roll-outs, were affected less by these policy changes.
- Different size of the distributors' metering asset bases and customer bases. This means the revenue to be recovered by each business will differ and charges will also therefore diverge.
- Different capitalisation policies among distributors. Where a business chooses to expense costs they will recover them immediately in charges. By contrast, capitalised costs are recovered in charges over time.
- Debt raising cost vary in proportion to the size of each business's metering asset base; the larger the debt raising, the greater the cost.

2 Background

When we set the AMI budgets for the 2012–2015 period in October 2011 (**2012–15 Approved Budget**)⁷ we included a placeholder for the 2015 charges, as required by the Order. That budget set out capital and operating expenditure that each distribution network service provider would need to acquire and the systems it would need to upgrade (such as expenditures on information technology and communications) to roll out advanced metering infrastructure,⁸ as mandated by the Victorian Government. We also set out forecast AMI charges for each year of the 2012–15 budget period that would enable the network operators to fully recover the forecast expenditures by the end of the 2012–15 budget period.

The 2012–15 Approved Budget set AMI charges based on *forecast* expenditures. The Order requires us to revise charges to apply in the next year using *actual* expenditures and any updates of forecast expenditure. The Order compels the businesses to submit these 'charges revision applications' to the AER by 31 August each year, for charges to apply in the subsequent years of the 2012–15 budget period. We must then make a determination on these applications by 31 October each year, unless we exercise discretion to extend the determination deadline.⁹

⁷ AER, Final determination: Victorian advanced metering infrastructure review: 2012–15 budget and charges applications, October 2011.

⁸ The Victorian Government mandated through an order in council that distributors were to rollout the meters.

⁹ The Order was amended on 21 October 2014 to allow the AER to extend the deadline for its annual AMI charges determinations to no later than 31 December each year. In accordance with the amended Order, the AER twice extended the deadline, initially to 5 December 2014, then to 12 December 2014.

3 2015 charges revision applications

We received the 2015 Charges Revision Applications from each distributor by the 31 August 2014 submission deadline. This meets the requirements of clause 5G.2 of the Order.¹⁰

The AER is required to accept the charges revisions proposed by the Victorian businesses if three criteria are met, namely that the expenditure for 2013 is:

- certified by an auditor
- in relation to matters that are within the scope of the AMI Order
- does not exceed the approved budget.¹¹

As we describe below, we reviewed the businesses' AMI charges revision applications and consider that all distributors have met the first two assessment criteria. This is because all businesses included audit reports in their applications that certified the veracity of 2013 expenditure and that the expenditures were within scope. Note that 2015 charges are based on actual spending with a two year lag (i.e. in 2013) combined with updated forecasts for 2014 and 2015 expenditures.

CitiPower and Powercor have met the third criterion because they incurred actual 2013 expenditures that are within the 2013 approved budgets.

Jemena, United Energy and AusNet Services incurred actual 2013 expenditures that are between 65 to 122 per cent above their budgets. Therefore, these three distributors have not met the third criterion. Nonetheless, they sought to recover their expenditure excesses through the 2015 charges revision application and submitted explanations in support of their proposals.

3.1 2013 expenditure excess applications

Jemena, AusNet Services and United Energy submitted the following reasons for incurring expenditure excesses in 2013. All three submitted that the Victorian Government's policy changes in respect of the AMI rollout since 2010–11 were the key reason for the additional expenditure.

1. Government policy changes

All three businesses submit that changes to the AMI rollout program in 2010 and 2011 made by the Victorian Government resulted in rollout delays. "Catching up" on the rollout delays in 2013 resulted in 2013 budget overspends. These policy changes claimed to affect the roll-out were:

- In March 2010, the Victorian Government arranged a moratorium on the businesses' introduction of Time of Use pricing.¹²
- A change in State Government in November 2010 resulted in a review of the AMI rollout program. The new Government asked the businesses to accept customer deferral requests until the review was complete.
- Energy Safe Victoria provided guidance to AusNet Services in relation to compliance with the minimum requirements of AS/NZS3000. The safety regulator required that all holes greater

¹⁰ Clause 5G.2 of the Order requires each business to submit their charges revision application by no later than 31 August.

¹¹ Clause 5I.2(a) of the Order.

¹² Victorian Government website, accessed on 26 September 2014, available at: <http://www.smartmeters.vic.gov.au/about-smart-meters/reports-and-consultations/advanced-metering-infrastructure-customer-impacts-study-volume-1/2-background>.

than 12mm must be covered with a patch to prevent contact with single insulated cables behind the meter board.¹³ This impacted the costs and timing of meter installations.

2. Impact of Government policy changes

- Policy announcements increased the number of customers refusing installation of smart meters. The businesses were uncertain as to whether or not the AMI rollout program would continue. The economies of scale associated with the mass rollout process were partially lost.
- In December 2011 the Government announced a continuation of the AMI program with changes. The higher 2013 expenditures reflect “catching up” on earlier deferrals of the rollout program. Note that all three businesses incurred expenditures that were lower than their 2012 budgets but higher than their 2013 budgets, which were expected to moderate.
- The AMI budget was determined based on the assumption that all customers would be reassigned to time of use tariffs on a compulsory basis. After the Time of Use Moratorium took effect, however, the customers were given the choice to opt into Time of Use tariffs. Some of the businesses did not have the technology to cater for both single-element and two-element meters. This delayed meter installs, caused a loss of synergies in the truck rollouts and higher expenditures than budgeted. Also, some businesses had to purchase and hold two element meters and maintain associated network tariffs, when their budgets were predicated on these being phased out.

3. Market condition changes—meter purchase and installation costs

- Installation costs increased partly due to higher installation rates negotiated by a limited pool of available, trained and skilled technicians.
- Higher installation volume and costs also due to having more installers returning to sites where customers had refused installations. The businesses claim that the media covered the smart meter rollout in a negative light and this increased the number of customers refusing installations.
- Increased meter purchase costs due to higher volumes of single element and two element meters purchased.

4. Other cost overruns

- The rollout delays in 2011 and 2012 resulted in cost overruns in the categories of project office costs, communication infrastructure costs, information technology, meter reading costs and other costs. The businesses classified these overruns as either capex or opex.

3.2 Other matters

3.2.1 Amendments to the debt risk premium

Jemena's 2015 charges revision application sought to remove a pair of Coca Cola Amatil bonds from that the debt risk premium calculation that would have the effect of increasing the debt risk premium by six basis points.¹⁴ This would consequently increase the Weighted Average Cost of Capital.¹⁵

¹³ AusNet Services, Expenditure Excess Application, p.18.

¹⁴ A component of the WACC.

¹⁵ Jemena, Charges Revision Application for CY 2015, August 2014, p. 6.

We concur with Jemena's submission. In this determination, we have amended the WACC to 7.61 per cent to account for the removal of the bond within the debt risk premium calculation. All distributors' charges models have been amended through inclusion of the updated WACC. See section 5.3 for further discussion.

4 Assessment approach

4.1 Legislative framework

The AMI Order in Council is made under sections 15A and 46D of the Electricity Industry Act 2000 (the Order). It was initially gazetted 28 August 2007, and subsequently amended 12 November 2007, 25 November 2008, 2 April 2009, 21 October 2010, 22 December 2011, 5 August 2014 and 21 October 2014.

Clause 5G.3 of the Order requires the AER to make a determination of the revised charges to apply by 31 October. However, on 21 October 2014, an amendment to the Order was gazetted giving the AER discretion to extend the time to make its determination to no later than 31 December each year.

Clause 5I of the Order specifies how the AER must determine the revised charges to apply in year $t+1$. This includes allowing in the building blocks determining the revised charges, actual capital expenditure and maintenance and operating expenditure for year $t-1$ that is:

- certified by an auditor
- in relation to matters that are within the scope of the AMI Order
- does not exceed the approved budget.

Where the total opex and capex exceeds the approved budget, the Order sets out the following process for the AER to follow in deciding whether or not an expenditure excess should be allowed in a building blocks for determining the revised charges:

- The AER may refuse to include an expenditure excess in a distributor's building blocks if the distributor has not satisfied the AER that the expenditure excess is "prudent" (clause 5I.7).
- "Prudent" is defined to mean "reasonably reflects the efficient costs of a business providing the Regulated Services (i.e. the AMI rollout and associated obligations)" (clause 5I.7A).
- In deciding whether it is satisfied that an expenditure excess "reasonably reflects the efficient costs of a business providing the Regulated Services", the AER may take into account (a) for contract costs, whether the contracts were subject to a competitive tender process, and (b) the matters in clause 5I.8 [below] (clause 5I.7B).
- In summary, the matters the AER may take into account are (clause 5I.8):
 - information available to the distributor
 - nature of provision, installation and operation of AMI
 - the rollout obligation (i.e. the distributor's obligations to rollout AMI according to the Order timetable)
 - state of relevant technology
 - project risks inherent in the AMI project
 - relevant market conditions
 - other metering regulatory obligations

- any other relevant matter.

The relevant clauses of the Order are extracted to Appendix A of this determination.

4.2 Prudency and efficiency

Clauses 51.7 and 51.7A of the Order require us to assess the prudency and efficiency of any AMI expenditure excess.

The Victorian Minister for Energy and Resources (the Minister) submitted that sub-clause 51.8(h) of the Order provides the AER with broader discretion for assessing prudency.¹⁶ The Minister further suggested that the legal landscape of the AER's prudency or efficiency assessment has changed significantly compared to the rules which governed its decisions for the 2012–15 AMI budget determinations.

“the effect of the amendments is that the focus is no longer on the circumstances of a particular distributor. Rather, it is a broader test that looks to the hypothetical efficient business providing metering services.”¹⁷

Assessing the circumstances of “the hypothetical efficient business” may still require having regard to certain “circumstances of the particular distributor”. What is prudent for one network operator may not be prudent for another in different circumstances, where the network characteristics are different.

We will still need to take into account the circumstances of the particular distributor to see whether it is subject to mitigating circumstances that justify different costs. The network and operational characteristics of businesses differ in significant ways. In assessing the efficiency of costs, a key factor in determining whether these differences constitute circumstances that mitigate cost differences, is whether they are exogenous to the business. In particular, differences that are not subject to management discretion, that affect costs, would ordinarily be considered mitigating circumstances. This is a feature of all benchmarking undertaken by the AER, including under the national electricity regime.

This contrasts with factors which are under the business' control. In assessing whether a distributor's costs exceed what a prudent and efficient hypothetical business would have incurred, it is important that the distributor is not considered in a vacuum. We must consider what the hypothetical efficient business would do when making the choices of the type that was being faced by the distributor being assessed. What is prudent and efficient for a distributor with 100 000 customers may not be prudent and efficient for a one with 1 000 000 customers (for example, the larger business may be able to secure lower unit costs for meters). Equally, prudent and efficient costs may differ for distributors that have vastly different network characteristics. A distributor with the greater geographical spread of customers in rural areas may require more communications capex to connect to the greater spread of meters than a distributor with a more concentrated, urban customer base. Likewise, the rural distributor may require more labourers to achieve installations across a wider area, with more hours-per-installation, than an 'urban' one. Any benchmarking between distributors for example would take such considerations into account.

The Minister's submission also suggested that the AER benchmark the costs of the distributors who have overspent (Jemena, United Energy and AusNet Services) against the costs of CitiPower and Powercor as a method for assessing prudency.¹⁸

¹⁶ Victorian Minister for Energy and Resources, AMI Charges Revision Applications 2015, 6 October 2014, p. 7.

¹⁷ Victorian Minister for Energy and Resources, AMI Charges Revision Applications 2015, 6 October 2014, p. 7.

¹⁸ Victorian Minister for Energy and Resources, AMI Charges Revision Applications 2015, 6 October 2014, p. 6.

We must investigate why one distributor's costs are different to that of another. In doing so, we cannot merely take the fact that one business may not have had an expenditure excess in a particular period being examined and use it to decide that another business should not be allowed to pass on any higher costs to its customers (because of the expenditure excess).

Benchmarking can, however, be used where costs had been incurred by distributors under the same or comparable conditions.

4.3 Assessment approach

We engaged Energeia to review the 2013 expenditure excess applications to assist our consideration of the prudent and efficient delivery of the program.

Energeia's approach

Energeia's overall assessment approach, directed by us, was to:

- identify the high value, high risk expenditure excesses. For example, Energeia reviewed whether some of AusNet Services' expenditures were due to WiMAX, which had previously been rejected by the AER.
- Energeia considered categories, such as meter reading opex and communications capex, were "high risk" because they may include costs for recovering WiMAX related costs.

In undertaking this task, Energeia reviewed expenditures by:

- identifying the events that caused the expenditure excess. Determine if these were within the distributors' control and if so, what steps were taken to minimise expenditure.¹⁹
- Energeia considered expenditure was efficient when it was the product of management processes designed to ensure that sustainably least cost options are systematically chosen and implemented from a range of feasible alternatives.
- Assessing whether these expenditures are efficient and prudent by comparing the actual expenditures against an independently developed estimate of a prudent and efficient expenditure.

This independent estimate was developed taking into account the matters in clauses 5l.8 and 5l.9 of the Order that we are directed to consider when assessing whether, and to what extent, an expenditure excess (a) reasonably reflects the efficient cost of [rolling out AMI] (clause 5l.8), or (b) whether a contract has been let in accordance with a competitive tender (clause 5l.9). Energeia then estimated the least cost option. This is estimated by applying only the effect of uncontrollable conditions on the AER approved 2013 budget expenditures.

In developing an estimate of the efficient cost, Energeia strove to find the necessary information which would have been available to the distributor at the time of change in conditions. This included Energeia undertaking independent research and developing the same questionnaires for the all five distributors (including CitiPower and Powercor) in relation to their management of the change in conditions.

¹⁹ Energeia, Review of Victorian Distribution Network Service Provider's Advanced Metering Infrastructure 2015 Charges Revision Applications Prepared for the Australian Energy Regulator, November 2014, p. 20.

To determine efficient costs, Energeia compared an expenditure line item against an independently developed “reasonably efficient” expenditure, where a reasonable comparator exists (for example due to the size and nature of the networks).

The effect of uncontrollable conditions is estimated by comparing the ex-ante expenditure due to the uncontrollable conditions and the ex-post expenditure. For example, if the number of no access for installations is claimed to have increased due to government policy changes (claimed to be an uncontrollable cause), Energeia estimated the impact by comparing the number of no access before the policy change and after. Energeia then applied the percentage change from this to the AER approved 2013 expenditure. This is the “least cost” expenditure or the efficient expenditure driven by the uncontrollable change in conditions.

- Energeia then applied a five per cent margin to this efficient expenditure and classified this as the “reasonably efficient expenditure”. It also did this to take into account potential estimation error and tolerance.²⁰ Energeia then benchmarked one distributor’s unit cost with its peer/s. For example, Energeia rejected almost all expenditure excess incurred for project management office by contending that CitiPower and Powercor did not incur similar high expenditures. This was despite them being subject to the same policy and circumstance changes to the AMI rollout program as other three distributors and that all distributors were being impacted in a similar fashion.
- Take into account the distributors’ response to the initial report that reflected the above, and make changes where necessary.

We provided the initial Energeia report to the distributors for comment. Each of the distributors made submissions to the effect that Energeia’s initial report misinterpreted or failed to properly apply the Order. We did not agree with these submissions.

A common criticism in this regard was United Energy’s assertion that “Energeia’s approach fails to address the relevant matters listed in clause 5I.8 of the [Order]”.²¹ Clause 5I.8 lists matters that we *may* take into account in assessing the overall question of whether an expenditure excess reasonably reflects the efficient costs of a business. It is not a list of matters that we, or any consultant engaged by us, must assess. Neither do those matters in any way constrain our discretion to judge whether excess expenditure reflects efficient costs.²²

Another recurrent theme in the distributors’ comments on Energeia’s initial report was that Energeia had not taken sufficient account of their individual circumstances. While the factors that led to expenditure excesses may be taken into account, ultimately the question remains whether those higher costs were “prudent” (clause 5I.7) in that they “reasonably reflect[t] *the efficient costs of a business providing the Regulated Services*” [emphasis added] (clause 5I.7A).²³

²⁰ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.10.

²¹ United Energy, Letter to Chris Pattas, 28 November 2014, p. 2

²² Notably, an earlier iteration of the Order stated that we “*shall take into account and give fundamental weight* [Emphasis added]” to the matters listed in clause 5I.8, when assessing efficiency. The Federal Court stated that, even under this more restrictive wording, “it remains for the AER to accord such weight as it considers appropriate to the various factors” in that clause, when assessing efficiency: *SPI Electricity Pty Ltd v Australian Energy Regulator* [2014] FCA 1012 at [66] per Foster J.

²³ As Energeia discusses in the Appendix 1 to its Final Report, the Order was significantly amended on 21 December 2011 (that is, after the submission and determination of AMI budgets for 2012-15). Notably, prior to those amendments, clause 5I.8 required the AER to take into account “[a list of matters, including] the circumstances of the distributor” in assessing whether to allow an expenditure excess. The amendments deleted “the circumstances of the distributor” was from that list. Further, as noted above, clause 5I.8 no longer requires the AER to have regard to the matters listed. In our view these amendments show legislative support for the assessment approach we have described.

The AER is responsible for applying the Order and assessing expenditure excesses. We engaged Energeia to assist us, on the basis of its experience and expertise in this field, in assessing the efficiency of the distributor's AMI rollout costs. We are satisfied that Energeia has undertaken this task appropriately.

The assessments of efficiency required under the Order involve questions of judgment on which reasonable minds are likely to differ. We have taken Energeia's findings into account in making our determination and have used our own judgments in making these determinations. We have applied the Order (the applicable provisions of which are summarised in section 4.1) in our assessment of expenditure excesses.

Application of the prudence and efficiency test

We have previously stated that the distributors' were faced with a number of unforeseeable changes in circumstances in 2013, particularly arising from changes in government policy. Clause 51.8 sets out circumstances that we *may* take into account in considering whether and to what extent an expenditure excess reasonably reflects the efficient cost of conducting the AMI rollout. These include the information available, market conditions, regulatory obligations and other matters that we consider relevant. Taking these into account, we view expenditure excesses as "prudent" under clause 51.7, where: (a) they arose as a result of circumstances that were unforeseeable by the distributor, and (b) the distributor responded to those unforeseen circumstances in an efficient manner.

We consider using CitiPower and Powercor's project management office expenditure as a benchmark of efficiency is appropriate in this context. However, this is not the same as benchmarking their costs to the total expenditure excess by other networks.

CitiPower and Powercor did not incur expenditure excesses. The Order does not allow the AER to review actual expenditures if within budget. The fact the Order requires a review of an expenditure excess does not mean we can simply reject the excess just because it has been incurred—it has to be considered on its merits under the Order. Furthermore, comparing CitiPower and Powercor's within budget expenditure with others' expenditure excesses is not consistent with the Order because, at the total expenditure level, it is not comparing like with like.

An analogy can be drawn with pass-throughs under the National Electricity Rules (NER). If a network service provider seeks a pass-through for higher costs we would test the efficiency and prudence of the expenditure (as well as whether it satisfied the other pass-through provisions), but we would not compare this with another network operator who did not use a pass-through. Having said that, to the extent that certain costs being incurred by other networks are comparable for benchmarking purposes, this would still be a relevant consideration.

We are satisfied Energeia has used benchmarking appropriately because they are comparing "like with like". For example, Energeia compared the project management office expenditures because the effect of changes in conditions on the management of these expenditures was the same for all five distributors. Yet, the way they managed their broader AMI programs were different, partly reflecting somewhat varying circumstances.

Energeia estimated efficient costs using either the prevailing market rate or the sustainably least cost option. This depended on the nature and size of the market in which the cost was incurred. In the case of project management office costs, the market is limited to the five Victorian distributors because these costs are specific to the Victorian AMI rollout program. We consider this type of benchmarking to be appropriate in this context because it is consistent with the benchmarking principle of comparing "like" with "like".

We consider Energeia's overall assessment approach is consistent with how we assess prudence and efficiency of expenditures in our other processes. We also consider that the techniques Energeia used are consistent with the Order. The amended Order contemplates a pass through type arrangement where costs are passed through if they meet the prudence and efficiency tests in the Order.

The Order allows elements of the expenditure excess that are caused by events beyond a distributor's control, but where expenditure is prudent, to be passed through in charges. That Energeia isolated elements of the expenditure excesses that are outside of the distributor's control is consistent with this condition of the Order.

However we do not accept Energeia's five per cent reasonableness margin. Energeia interpreted the word "reasonably" in clause 5I.7A ("the expenditure excess is prudent where it *reasonably* reflects the efficient costs of providing Regulated Services") to allow a margin above the budget within which expenditure excesses are effectively automatically allowed. It fixed this amount at five per cent. Energeia also considered that a five per cent margin was justified given the uncertainty involved in assessing efficiency. However, the Order requires us to assess the prudence of all of an expenditure excess. There is no basis for us to uniformly assess that a distributor's expenditure excess (or portion of it) is prudent, merely because it is below a set amount. Further, we are particularly conscious of the legislative history of this aspect of the Order; previously, expenditure excesses within a specified percentage of the budget were not subject to the prudence test, but the Victorian government has now removed these margins from the Order.²⁴ To reintroduce a five per cent reasonableness margin would be inconsistent with the legislative intent evidenced by this amendment to the Order.

We also had regard to the Essential Services Commission of Victoria's audit finding on the best endeavours of all businesses to meet their rollout obligations. This report however was less relevant about the degree to which costs had been prudently and efficiently incurred.

²⁴ Under previous iterations of the Order, expenditure excesses of 20 or 10 per cent were allowed to be included in the building block costs without any prudence assessment. These allowances likely reflected an assessment that distributors were subject to relatively higher project risks and unknown factors early in the rollout process. As the rollout progressed, the government took the decision to remove these additional allowances in the December 2011 amendment to the Order. The Order now requires us to assess the prudence of 100 per cent of expenditure excesses.

5 Key findings

5.1 Actual 2013 expenditures

The actual expenditure in 2013 was above the approved budget for that year for Jemena, AusNet Services and United Energy. CitiPower and Powercor expenditures were below the approved budget for that year. Table 5-1 compares the businesses' actual expenditure with the expenditure set out in the approved budget.

Table 5-1 Approved budget and actual expenditure 2013 (\$m, real 2013)

	CitiPower	Powercor	Jemena	United Energy	AusNet Services
Actual (\$)	41.9	105.5	62.0	97.6	177.7
2012-15 Approved budget(\$)	42.8	107.7	36.3	43.9	107.5
Difference (\$)	-0.9	-2.2	25.7	53.7	70.2
Difference (per cent)	-2.0	-2.1	70.6	122.2	65.3

Source: 2015 charges revision applications and AER analysis.

It can be seen that Jemena, AusNet Services and United Energy have incurred actual 2013 expenditures that are above their 2013 budgets. We have assessed whether the expenditure excesses are prudent.²⁵

In meeting the requirements of clause 51.2(a) of the Order, all five distributors submitted an audit report which certified that their actual 2013 expenditure incurred is for activities within scope and has been incurred in the amount claimed.

However, the Order states that an audit report is not conclusive as to whether expenditure is for activities that are within scope. This provides opportunity to the distributors to recover costs as AMI costs when these same costs may have been compensated for through another regulatory process. The Minister raised this concern in his submission.²⁶

We agree with the Minister that the distributors should not be able to "double count" costs. To account for this issue, we sought information on actual 2013 expenditures through a separate annual regulatory information notice process. We then compared this information with the actual 2013 expenditures submitted in the 2015 charges revision applications. We are satisfied that the actual 2013 expenditures submitted are for AMI only.

5.2 Assessment of 2013 expenditure excess applications

5.2.1 Decision

Our determination on the expenditures that will be included in the building block costs is set out in Table 5-2. It also shows the excess expenditure by distributors that we have approved.

²⁵ Clause 51.7A of the Order.

²⁶ Victorian Minister for Energy and Resources, AMI Charges Revision Applications 2015, 6 October 2014, pp. 9–12.

Table 5-2 Determination of 2013 expenditures including excess (\$m, \$2013)

Category	Jemena	United Energy	AusNet Services
Total proposed	62.0	97.6	177.7
Total approved	57.3	86.9	154.9
Difference	4.7	10.7	22.7

Source: Energeia review findings and AER analysis.
Note: numbers may not add due to rounding.

5.2.2 AER considerations

Jemena, United Energy and AusNet Services did not agree with Energeia's initial report's (provided to the businesses only) approach to assessing expenditure excesses. Their views are set out below, along with our considerations of same.

We have reproduced in Table 5-3 Energeia's description of the external influences on the rollout. These are regarded as the key environmental changes impacting the businesses' rollout plans and have been used by us to make this determination.

Table 5-3 Issues impacting advanced metering infrastructure rollouts

Category	#	Change	Occurred	Impacted	Assessed
Regulatory requirements	R1	Enhanced safety	2011–13	Supervisory labour and installation costs	Yes
	R2	No controlled load	2009–13	Increased skips until solution ready	Yes
Market conditions	M1	>CPI labour price growth	2011–13	Labour availability and pricing	Yes
	M2	Labour availability	2011–13	Installation rate	Yes
Nature of AMI Services	A1	Higher truck support, etc.	2011–13	Installation unit costs	Yes
	A2	No access rates	2009–13	Scheduling and travel time	Yes
Rollout obligation	O1	Government review	2011	No access rates	Yes

Source: Energeia December 2014 report, Appendix 1, p.3.

While we agree that the distributors were subject to unforeseeable changes in circumstances, the key issue is whether business' responses to those changes were prudent and efficient.

Energeia evaluated whether the following significant and high risk portions of expenditure excesses are prudent and efficient:

- The meter purchase expenditure incurred by Jemena, United Energy and AusNet Services
- The meter installation expenditure incurred by Jemena, United Energy and AusNet Services
- The communication infrastructure and installation costs incurred by AusNet Services
- The meter reading expenditure incurred by AusNet Services
- The project office expenditure incurred by United Energy.

Jemena, United Energy and AusNet Services disputed Energeia's findings in relation to the prudence of these expenditure excesses in their responses to Energeia's initial report. Energeia's final report responded to the distributors' submissions. The comments on Energeia's findings by Jemena, United Energy and AusNet Services were considered by Energeia. These comments led Energeia to revise its findings in relation to two categories of expenditure.

Our assessments of the expenditures excesses in light of the advice received and submissions to us are set out below.

Jemena

Our determination is not to accept \$4.7million (real 2013) of Jemena's expenditure excess.

We concur with Energeia's finding that of the expenditure excess Jemena proposed, \$4.7 million (real 2013) is inefficient spending related to installation capex. This comprises above market rates paid for labour installation and for the amount of truck support cost that is above the closest comparator, which is United Energy's actual truck support cost.

Jemena claimed State government policy changes and new safety rules were the key reasons for its expenditure excess. The biggest impact was on meter installation costs, which was the highest value and one of the highest risk components of Jemena's expenditure excess. (Details of Jemena's submission are in the 2013 expenditure excess applications section above.)

We sought to establish whether events leading to the expenditure excess were beyond Jemena's control. Energeia found that the following cost increases claimed by Jemena did occur because of uncontrollable changes in conditions:

- Using publicly available information, Energeia found the installation labour costs increased after the government policy changes.
- Energeia found that new government safety rules resulted in additional spending on truck support required for metering installations.

Energeia considered that these changes in conditions would have resulted in actual incurred expenditures being above the AER approved budgets for these cost categories, all else being equal. However, Energeia considered that while government policy changes were not within Jemena's control, its actions in responding to those were. We concur with Energeia in this regard.

As previously explained, the circumstances that we may take into account in considering whether expenditure excesses reasonably reflect efficient costs include the information available, market conditions, regulatory obligations and other matters. However, the fact that these conditions caused part of Jemena's expenditure excess does not mean that all of the expenditure excess automatically satisfies the prudence test.

The Order allows an expenditure excess to be “passed through” if it is prudent, in that it reasonably reflects the efficient costs of a business providing AMI services. We consider an expenditure excess is prudent if it is reflective of the sustainably least cost option available. Therefore, only the sustainable least cost option to manage the consequences of the government policy changes or other uncontrollable factors should be recovered in charges.

To assess whether Jemena has met this requirement, Energeia undertook a prudency review of the highest value and highest risk portion of Jemena’s expenditure excess, meter installation expenditure. Energeia investigated whether Jemena efficiently managed the controllable drivers of the changes in conditions by taking measures to minimise costs where possible.²⁷

Energeia developed an estimate of the reasonably efficient labour installation spend that a distributor could have incurred to manage these change in conditions.²⁸ This estimate is based on publicly available information on labour installation rates.

Energeia’s analysis showed that prevailing wage rates were 16 per cent higher than approved budgets, adjusted for AER approved real cost increases in 2013. They concluded that an efficient business would not pay more than 16 per cent above the installation rates previously determined by the AER to be efficient, all else being equal.²⁹ Energeia found that Jemena’s installation labour rate exceeded this quantum and therefore was inefficient.

Energeia also estimated the effect of customer no access rates on meter installation costs. It did this by adjusting for the higher travel portion of total installation labour cost by the change in no access rates. This cost impact was added to its estimation of the efficient labour cost increase of 16 per cent. These formed Energeia’s estimation of the efficient installation cost a prudent distributor could have incurred to manage the change in conditions cited by Jemena. Energeia then applied a five per cent margin to the efficient installation cost to arrive at its estimation of reasonably efficient installation cost.

We adopted Energeia’s estimation of efficient installation cost with the exception of the five per cent margin. In our view Energeia’s estimate of the efficient cost compensates a prudent distributor for the actual increase in no access sites. This is what Jemena had encountered. This takes into account the impacts of change in government and regulatory policies—circumstances which Jemena cited.

Energeia has also taken into account labour market conditions using publicly available information on the prevailing market rates for labour installation.

Jemena stated that changes in government and regulatory policies had significant and difficult to quantify impacts on its installation costs.³⁰ It disagreed with Energeia’s estimation of the efficient installation cost.

- Jemena submitted that taking prevailing electricians’ labour rates as the basis of efficient installation cost was an irrelevant consideration, and that Energeia was opaque in how information had been taken into account.³¹

²⁷ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.15.

²⁸ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.10.

²⁹ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.16.

³⁰ Jemena, letter to the AER dated 26 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment, pp. 1-2.

³¹ Jemena, letter to the AER dated 26 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment, p.2.

- Jemena considered a margin of 10 per cent (compared to Energeia's five per cent) be applied to the estimation of efficient installation costs. It submitted this is the margin referred to in the Cost Recovery Order In Council contingency amounts from 2013.³²

We have had regard to Jemena's submission and Energeia's final report. We consider that Energeia's assessment approach in its final report takes into account government and regulatory policy impacts because its independent estimate of the efficient installation cost was developed with these changes in mind. Moreover, Energeia showed what the efficient installation cost may have been if a prudent and efficient distributor had encountered the change in conditions cited by Jemena.

We have accepted Energeia's assessment in its final report that there was no evidence of a shortage of electricians as stated by the distributors. Although the labour pool might have tightened, the entire meter rollout still only required about one per cent of Victoria's available electricians. It may be the case that the distributors were prepared to pay higher than market rates to attract sufficient installers to complete the program by the December 2013 deadline. Energeia considered that a tight labour market would only affect electricians' availability where existing installation contracts were offering below market rates.³³ It stands to reason that a significantly delayed rollout could only get back on track through payment of ever higher labour rates.

That higher rates were paid is not the prime concern with Jemena's approach. Rather, it is that the distributor was prepared to pay *more* than what the change in conditions dictated would be an efficient increase. Energeia sought to estimate what this efficient increase ought to have been, based on freely available market information. It arrived at an increase of 16 per cent, compared to Jemena's 121 per cent. Energeia is correct to conclude that what is pertinent is the efficient quantum—it is that which a benchmark efficient entity would pay.³⁴ This meets the objective of the Order and our assessment approach.

In relation to the problem of "no access" (customers refusing to allow a smart meter to be installed at their premises), Jemena disagreed with Energeia's estimation of efficient no access installation costs.³⁵ Jemena considered the efficient cost should be estimated by accounting for those it incurred to manage such sites. Jemena said these costs related to:³⁶

- travel costs it has previously submitted
- the no access treatment plan known as the Neutral Integrity Test Point Program
- the no access refusal fee for sites where a customer refused to permit an installer to complete an already started job
- additional installers engaged at the end of the rollout program to fulfil the best endeavours obligations.

We accept that Jemena could not access every site it attended. This is a common assumption for all distributors—including CitiPower and Powercor who had no expenditure excess. Scale economies are lost from turning up to a site, not being able to gain access, and subsequently returning at a later

³² Jemena, letter to the AER dated 28 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment, p.2.

³³ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.31.

³⁴ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.32.

³⁵ Jemena, letter to the AER dated 26 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment, p. 3.

³⁶ Jemena, letter to the AER dated 28 November 2014, Jemena 2015 Charges Application –Prudent expenditure assessment, p. 2.

date.³⁷ Our 2012–15 Approved Budget assumed a level of no access which was built into the cost (and charges) profile.

Energeia used Jemena's information to calculate the change in no access rates by adjusting the travel portion of the total installation labour costs by the change in no access rates. The market price for labour was used in this calculation. This delivered an estimate of the efficient costs associated with the changes to no access rates. These are lower than those incurred by Jemena. The Order requires only the prudent and efficient portion of an expenditure excess be recovered by the network operator through its metering charges. Such costs accord with our approach of using a benchmark efficient entity. Therefore, not all of Jemena's expenditure excess on this category can be accepted.

Energeia compared Jemena's actual truck support expenditure to that of United Energy's. We agree this is a relevant comparison. This is because Jemena's original pricing for truck support was relative to those set for United Energy on account of both companies initially being part of the same buying group through their then joint program. Both distributors were also subject to the same change in conditions.

Energeia found that Jemena's truck support costs were higher than United Energy's even though both distributors were subject to the same change in conditions. Energeia concluded that Jemena's actual installation labour and truck support costs were inefficient because they are above sustainably least cost options.

We are satisfied that Energeia's findings demonstrate that the options Jemena used to manage the change in conditions were not the sustainable least cost options available to it. Energeia demonstrated that cheaper sustainable alternative options were available to Jemena at the time it made its decision on meter installation spending. The fact that information on installation labour rate was readily available to Jemena showed that it could have taken action to manage the increased installation cost sooner than it did.

Similarly for truck support costs, Jemena did not appear as efficient as United Energy, even though it was subject to the same change in conditions which caused its expenditure excess.

Jemena submitted that it found errors in Energeia's modelling. Energeia reviewed these submissions, and relevantly responded that it:

- Agreed it had incorrectly included Jemena's business as usual volumes with total mass rollout meters installed. Correcting this returned \$1.2 million (real 2013) to Jemena.
- Disagreed with Jemena's contention that the number of actual installations was used to calculate the cost per installation, not the number of truck rolls. No correction was therefore made.
- Disputed a proposed 10 per cent "reasonableness" margin in place of five per cent. Energeia referred back to its defence of the five per cent quantum in its final report and addendum. No correction was therefore made.
- Opposed Jemena's contention that the no access delta was wrongly calculated and that a larger travel time allowance was necessary. No correction was therefore made.

³⁷ Examples include locked gate or meter board, guard dog or inhospitable occupant. A site may not be revisited for weeks, or even months.

- Disagreed that the neutral integrity test point program and its costs. Energeia considered the program effective in increasing the number of installations but was done so at a cost exceeding the efficient and prudent level.
- Dispute the marginal increase in costs associated with the no access refusal fee
- Did not agree that the hiring of three additional installers at the tail end of the rollout failed to address the best endeavours obligation.

We have accepted the findings of Energeia described above, with the exception of its 5 per cent margin, for the reasons previously described previously.

United Energy

Our determination is not to accept \$10.7 million (real 2013) of the expenditure excess.

United Energy claimed State government policy changes and meeting its best endeavour obligations as key reasons for its expenditure excess. The biggest impacts were on its meter installation and project management cost, which were the highest value and highest risk components of United Energy's expenditure excess. (Details of United Energy's submission are in section 3.1).

Energeia's initial report (provided to the businesses only) considered \$5.2 million (real 2013) of meter installation capex to be inefficient. This comprises the difference between the actual meter installation costs and Energeia's independently developed reasonably efficient market cost. This includes a five per cent margin to provide a reasonable level of tolerance around the "efficient expenditure". Energeia subsequently revised the meter installation capex that it considered to be inefficient to \$4.9 million (real 2013).³⁸

We accept Energeia's assessment approach and the estimates of efficient expenditure it developed. However, we do not consider that the five per cent margin should be applied for the reasons set out in section 4.3.

We are satisfied with Energeia's findings that United Energy:³⁹

- Incurred \$28.4 million for meter installation expenditure in 2013 (which is \$25.7 million higher than the efficient level of expenditure determined by the AER for the 2012–15 budget).
- Incurred some excess expenditure that was due to higher no access rates, tight labour market conditions, changes in the volume mix and safety requirements.

Energeia independently assessed each of the conditions United Energy claimed to be uncontrollable drivers of its expenditure excess. We are satisfied that Energeia's findings in this regard were appropriate. Energeia found that:

- The change in no access and labour market conditions were both outside of United Energy's control. However, Energeia considered that the impact of the changes in no access rates and labour market conditions on United Energy's 2013 unit prices was within their control through their contracting and service provider management decisions.⁴⁰

³⁸ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.21.

³⁹ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, pp.19–20.

⁴⁰ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.20.

- The change in site mix was largely outside of United Energy’s control. However, the rate of meter installation truck support and rate of meter panel rewiring should have been within United Energy’s control.⁴¹

Energeia undertook a prudence review of United Energy’s meter installation expenditure. Energeia investigated whether United Energy efficiently managed the controllable drivers of changes in conditions by taking measures to minimise costs where possible.⁴²

Following its assessment methodology, Energeia developed an estimate of what a reasonably efficient distributor would have needed to spend on labour installation to manage the relevant changed conditions. The efficient labour installation expenditure estimate Energeia developed for United Energy takes into account the prevailing market labour costs United Energy would have faced at the time of addressing the change in conditions. It also considers the additional installation costs due to the increase in installation refusals. Energeia obtained information about the prevailing market labour cost from publicly available information which would have been accessible to United Energy at the time it faced the uncontrollable conditions. Energeia found that an efficient business would not pay more than 16 per cent above the installation rates previously determined by the AER to be efficient, all else being equal.⁴³ Energeia found that United Energy’s spending exceeded this, and therefore, to the extent of this excess, was inefficient.

We also obtained information from United Energy in relation to the number of “no access” sites it faced at the time. From this, Energeia calculated the expenditure United Energy should be compensated for as a result of the “no access” sites.

Together, Energeia’s estimate of the efficient meter installation labour cost and the efficient no access cost formed its estimation of the efficient meter installation expenditure. Energeia found \$4.9 million (real 2013) of United Energy’s meter installation expenditure to be inefficient.⁴⁴

Energeia investigated the range of plausible options which a distributor could have considered to independently develop an estimate of the least cost meter installation unit price which United Energy should have reasonably been able to apply. We have adopted Energeia’s recommended reduction in labour price. As a result, we have determined not to include \$6.0 million (real 2013) of installation capex in the building block costs (no margin was applied).

In its submission to the AER, United Energy did not accept Energeia’s initial report and did not agree with the consultant’s estimation of the efficient installation cost. It stated that:⁴⁵

- Energeia’s estimation of efficient installation labour expenditure is based on unreliable data source and that this information was irrelevant to its labour contracting process and management decision.
- Energeia’s estimate of the efficient installation labour expenditure does not take into account the variation in installation rates United Energy faced throughout 2013 and the additional training and productivity ramp up costs it incurred to engage additional installers in 2013.

⁴¹ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.20.

⁴² Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.20.

⁴³ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.17.

⁴⁴ Energeia, Review of Victorian Distribution Network Service Providers’ Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, pp.19–21.

⁴⁵ United Energy, letter to the AER dated 28 November 2014, Energeia report, AMI Charges Revision Application 2015, p. 1.

- United Energy considered that Energeia had not clearly explained the adjustments for travel cost made to the installation cost to reflect no access sites.
- It was necessary to bring its installation program in-house in order to comply with its best endeavours obligation. United Energy considered the increased installation costs to be an inevitable consequence of this decision.
- Energeia did not take into account the information it submitted to the AER, including its circumstances, nor the matters listed in clause 51.8 of the Order.

We consider that Energeia's assessment approach in the final report takes into account the government policy changes, United Energy's particular circumstances (including its joint installation program with Jemena) and changes in regulatory policy.

This is because Energeia's independent estimate of efficient installation cost was developed with these changes in mind. Moreover, Energeia showed what the efficient installation cost may have been if a prudent benchmark efficient distributor had encountered the change in conditions cited by United Energy.

Energeia considered \$4.6 million (real 2013) of project management office costs to be inefficient. Energeia considered the difference between the distributor's expenditure and the AER approved costs (with a five per cent margin applied) to be inefficient. Energeia found that the key driver of United Energy's higher than allowed project management expenditure was the termination of their contract with Jemena and transition to internal management of the program. In particular, the decision to incur this additional expenditure occurred after 18 months of attempting to work with Jemena to get the program back on track.⁴⁶

Energeia reviewed whether United Energy had efficiently managed the controllable drivers of its project management costs by minimising costs where possible.⁴⁷ The consultant found that there were material, largely uncontrollable changes in conditions that contributed to the time United Energy fell behind in its rollout program, from June 2010 to its decision in June 2013 to take over the project management function from 31 July 2013. These changes include:⁴⁸

- higher no access rates increasing labour requirements and meter installation attrition
- below market allowances for labour due to higher than allowed real cost increases.

Energeia acknowledged that these changes impacted on the meter installation service provider's ability to attract and retain the necessary number of metering installation employees to keep the program on schedule. However, Energeia considered this was an ongoing issue since June 2011 when the business missed the Order's installation target for the first time. By the end of the 2012, United Energy's program had been significantly behind schedule (for at least 18 months).

Energeia reviewed the key options that would have been available to United Energy when its program fell behind in 2011. These included enforcing its contract's performance management provisions with Jemena or terminating the contract and taking over the program themselves. Energeia found that United Energy had investigated both options, but chose to take over AMI related activities from

⁴⁶ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.21.

⁴⁷ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.21.

⁴⁸ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.21.

Jemena. It did this on 31 July 2013, more than 18 months after falling behind schedule.⁴⁹ Moreover, Energeia contended that all five Victorian distributors (including CitiPower and Powercor) experienced similar program delays. The fact that CitiPower and Powercor did not incur overspends makes them the efficient benchmark in this case.⁵⁰

In a submission to the AER, United Energy did not accept Energeia's assessment approach for project management expenditure and disagreed with its findings. United Energy stated that:⁵¹

- The delays in its AMI program were largely uncontrollable and were the underlying cause of its project management expenditure.
- Energeia did not take into account:
 - the AER's approved budget, making no allowance for project office costs beyond 30 June 2013—the forecast completion date of the AMI program.
 - The project delays were beyond United Energy's control, coupled with its best endeavours obligation required the project office activities to be continued.
 - its claim that it made a prudent decision to bring its program in-house in the second half of 2013. Costs incurred as a result of this are prudent.
- It had faced more significant delays than CitiPower and Powercor, and thus its project management costs should not be benchmarked to them.
- It was required to bring the project management program in-house in order to satisfy its best endeavours obligation. Energeia did not consider its actual circumstances and available options.

However Energeia had a different view. Specifically:

- Disagreeing with United Energy's assertion that waiting more than 18 months after its program fell behind before taking corrective action reflects efficient costs. Energeia's final report provides this analysis.⁵²
- Energeia corrected United Energy references to the delays uncontrollable noting that its views were that certain changes in conditions which contributed to the program delays were uncontrollable.⁵³
- Energeia noted that it has not adopted the project management costs of another distributor. Energeia has adopted the costs of an efficient business providing the regulated services.⁵⁴
- Energeia's approach included an independent test of the effectiveness of United Energy's approach to efficiently control excess expenditure. Effectiveness was assessed in a number of ways depending on the availability and nature of comparable benchmarks. In the case of

⁴⁹ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.22.

⁵⁰ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, p.22.

⁵¹ United Energy, letter to the AER dated 28 November 2014, Energeia report, AMI Charges Revision Application 2015, attachment, pp.9–14.

⁵² Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p.48.

⁵³ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p.48.

⁵⁴ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p.49.

project management expenditure, Energeia considered Powercor and CitiPower's costs and schedule performance as benchmarks. However, Energeia did not rely on them exclusively. Energeia also considered its own experience of its own personnel managing meter rollout programs and managing under-performing contractors.⁵⁵

- Energeia clarified that it did not claim that CitiPower and Powercor faced exactly the same conditions as United Energy. Energeia stated that they were exposed to the same changes in two specific conditions –labour and access rates. Energeia's view is that the distributors are not sufficiently different in conditions to justify the difference in United Energy's schedule or cost performance relative to CitiPower and Powercor.⁵⁶
- Energeia addressed these concerns in its final report. In particular, what an efficient benchmark entity providing AMI services would have done. These actions include:⁵⁷
 - Increasing contract prices in 2011 by no more than the real increase in the price of labour and the additional efficient costs due to no access
 - More effective contract management to get the program back on schedule by late 2012. Perhaps by changing program managers and/or meter installation service providers and/or bringing the program in-house sooner.
 - Applying contractual remedies to recover some of their costs.
- Energeia clarified that it estimated the efficient project management costs in 2013 to be the AER's determined efficient project management costs in 2013, plus a margin. This is explained in its report.⁵⁸
- Energeia assessed the materials it considered relevant to an assessment of the efficient costs of a business providing regulated AMI services. United Energy did not provide information which Energeia could use as part of its testing of the effectiveness of United Energy's response to changes in its conditions. For example, United Energy never considered the potential to in-source the program at lower cost or to recover materially higher costs due to contractor non-performance through contract remedies.⁵⁹

On the whole we accept Energeia's analysis, with the Order's requirement for prudent and efficient cost recovery being the main consideration in our deliberations. The fact that an expenditure excess is incurred is not determinative of its efficiency as contended by the distributors. Therefore, we have determined that the entire project management office expenditure excess will not be approved.

AusNet Services

Our determination is not to accept \$22.7 million (real 2013) of the expenditure excess.

Our February 2013 determination of AusNet Services' budget for the 2012–15 AMI budget period found that the only "prudent" (under the Order) choice for a business in its position would have been to switch from WiMAX to mesh radio communications technology before submitting its 2012–15

⁵⁵ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p.49.

⁵⁶ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, pp. 49–50.

⁵⁷ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p. 50.

⁵⁸ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p. 50.

⁵⁹ Energeia, Review of Victorian Distribution Network Service Providers' Advanced Metering Infrastructure 2015 Charges Revision Applications, Prepared for the Australian Energy Regulator, December 2014, Appendix 1, p. 51.

budget (i.e. by 28 February 2011), primarily due to problems and additional costs arising from WiMAX. We concluded that AusNet Services' costs incurred resulting from adopting WiMAX technology that exceeded those that would have been incurred if using a mesh radio solution instead (before submitting its 2012–15 budget application) did not (and will not) meet the commercial standard required by the Order. We only allowed AusNet Services to recover costs at the level it would have incurred them had it switched to mesh radio technology. AusNet Services has nonetheless continued its AMI rollout using WiMAX technology.

AusNet Services challenged our decision to disallow costs resulting from its WiMAX choice in the Competition Tribunal and the Federal Court. Both the Tribunal⁶⁰ and the Federal Court⁶¹ affirmed that our decisions were correct in this regard.

Therefore, we continue to only allow AusNet Services to recover AMI costs to the extent that they would have arisen had AusNet Services switched to mesh radio technology before submitting its 2012–15 budget, as required by the commercial standard set out in the Order. To allow AusNet Services to recover incremental WiMAX-related costs would be to have consumers to pay AMI costs that were incurred as a result of AusNet Services' choice to persist with the more expensive and problematic WiMAX technology, a choice that has been determined not to be prudent under the Order.

We reviewed AusNet Services' application to ensure that actual 2013 expenditures did not include costs related to WiMAX previously rejected by us.

The Minister also raised a concern with AusNet Services' recovery of WiMAX related technology costs. We agree with the Minister's view that AusNet Services should not be able to recover any more than the efficient costs associated with a mesh radio solution.

Energeia also recommended that AusNet Services only recover meter costs related to mesh radio that was set out in our February 2013 determination.

AusNet Services advised that 2013 actual expenditures do not include WiMAX related expenditures.⁶² However, we did not find this to be the case. We were furnished with a confidential document showing that some WiMAX related costs had been included.⁶³

We also observed that AusNet Services' submitted charges included an error. Correcting this resulted in proposed 2015 charges increasing by, all else equal, eight per cent. AusNet Services suggested incorporating the revenue impacts of its error in future years' charges. We have instead included the revenue impact in the 2015 charges.

Energeia's review has found that some of AusNet Services' 2013 expenditures were impacted by WiMAX. This was a relevant consideration for us, given our February 2013 determination not to fund AusNet Services for certain WiMAX related expenditures considered inefficient (subsequently endorsed by the Tribunal). Energeia found that the majority of inefficient expenditures in AusNet Services' expenditure excess are due to the inclusion of WiMAX costs that were disallowed as a result of our February 2013 determination.

⁶⁰ *Appeal by SPI Electricity* [2013] ACompT 7.

⁶¹ *SPI Electricity v AER* [2014] FCA 1012.

⁶² AusNet Services, one page document submitted to the AER in relation to its AMI excess expenditure application (2013), 15 July 2015 (confidential).

⁶³ Document titled SP AusNet AMI Expenditure Excess Application (2013), provided by AusNet Services dated 15 July 2014 in a meeting with AER staff.

We are satisfied with Energeia's findings and consider that it addressed issues raised by the Minister about possible recovery of WiMAX related expenditure. We agree with the Minister that "Ausnet should not be able to recover any more than the efficient costs associated with a mesh radio solution." We concur because our task was to ensure that the distributor did not seek revenue to fund costs associated with WiMAX that were not approved in our February 2013 determination. Simply Energy echoed this with concern that retail customers not pay more "...due to AusNet Services' inability to deliver on the AMI project in an efficient and effective manner".⁶⁴

The AER informed AusNet Services that WiMAX related expenditure excesses that were directly associated with the expenditures rejected in the February 2013 determination would not be accepted. To this end, we have accepted Energeia's advice that \$2.1 million (real 2013) of meter capex represents the additional incremental costs of using WiMAX technology in place of mesh radio. Such costs were rejected by us in our February 2013 determination.

Furthermore, Energeia considered approximately \$12 million (real 2013) of communications capex was inefficiently incurred. This was because Energeia considered it was driven by the WiMAX technology choice, given AusNet Services' claim for incurring this portion of the additional spend (increased tower installation costs [unit price variance] and higher installation volumes) arose from customer resistance to the installation of WiMAX related infrastructure. We understand AusNet Services' claim that the level of customer resistance to the installation of AMI infrastructure is a matter giving rise to costs outside of its control. However, in Energeia's view, some of those costs were incurred as a result of AusNet Services' use of WiMAX technology. That is, assuming the same level of customer resistance to AMI technology installation, Energeia's assessment (with which we agree) is that AusNet Services' increase in costs from customer resistance would have been lower were they installing mesh radio technology.

In particular, WiMAX required an increased level of communications capex on communications tower installations and unit costs, which would not have been required with a mesh radio solution (approximately \$12 million (real 2013) as noted above). Nonetheless, we applied a volume variation adjustment of \$5.7 million (real 2013) to account for the timing differences between communications expenditures that AusNet Services deferred from 2012 and incurred in 2013 instead. In all other respects, we have not approved the communications capex expenditure excess.

Further analysis of AusNet services proposal reveals the extent to which WiMAX expenditures impact other elements of its AMI rollout.

In its initial report (provided to the businesses only) Energeia considered \$4.2 million (real 2013) of meter reading opex to be inefficient. AusNet Services disputed this and submitted incorrect meter cost modelling by Energeia and furthermore attributing all the increase in 2013 meter reading costs to delays caused by the adoption of WiMAX technology was wrong.⁶⁵ It submitted there were also other reasons why meters had to be read manually.⁶⁶

Nonetheless, we consider that AusNet Services could not meet rollout targets because it proceeded with WiMAX communication technology instead of switching to mesh radio from February 2011.⁶⁷ Doing so would have avoided manual meter reads. Distributors with mesh radio solutions were not

⁶⁴ Simply Energy, Proposed Victorian AMI charges – Confidential, 14 November 2014, p.1.

⁶⁵ AusNet Services, letter to the AER dated 28 November 2014, Response to Energeia's report on the 2015 AMI Charges Application, p.2.

⁶⁶ Delayed meter capex, installation labour market pressures, technical issues including management of the information technology program. See AusNet Services, letter to the AER dated 28 November 2014, Response to Energeia's report on the 2015 AMI Charges Application, p.2.

⁶⁷ Spelled out at the beginning of this section and at length in our February 2013 determination, since affirmed by the Australian Competition Tribunal.

affected by this problem. This is backed by AusNet Services own claim that the additional opex was necessary due to the rollout program falling behind schedule, leading to a greater number of meters needing to be read manually than assumed by the AER.⁶⁸ Attempting to de link information technology issues and delayed capex from the WiMAX communications equipment choice is not credible.

We conclude that this spending is inefficient given our February 2013 determination concluded that AusNet Services should have switched to a cheaper mesh radio solution on 28 February 2011.⁶⁹

Energeia amended an error in its calculations, resulting in an \$80,000 (real 2013) adjustment in favour of AusNet Services. With respect to higher rates of no site access, Energeia commended AusNet Services' for keeping the rate at seven per cent, which is low compared to other distributors. This figure was only two percentage points higher than that assumed in the 2012–15 Approved Budget. Energeia considered this slight uptick immaterial considering the program's size and scope. We disagree with this given that CitiPower and Powercor reached their rollout targets despite having even higher rates of no access than their peers.

AusNet Services claimed Energeia erroneously failed to take account of increased costs per meter read caused by dispersed rather than concentrated manual meter reads. However, Energeia's final report concludes that around five per cent of the distributor's sites had access problems in 2010. It found 96 per cent rollout program completion by December 2013, implying the seven per cent no access issue had been overcome by the end of that year. Therefore site access appears not to be as significant an issue as suggested by AusNet Services. Substantively, it further implies that a switch to mesh radio from February 2011 would have obviated the need for these manual reads. Therefore, our conclusion is the expenditure excess claimed for manual meter reads cannot be considered prudent and efficient.

Meter installation capex AusNet Services states that having a variable priced contract instead of a fixed price one does not mean that it was inefficient. The distributor claimed it managed higher labour costs well in the circumstances and that therefore meter installation spend was prudent. Energeia's final report responded that meter installation capex was accepted because actual expenditure did not exceed Energeia calculation of efficient costs for this expenditure category. The consultant did not take AusNet Services' later than planned meter installation as a sign of inefficiency.

Turning to project management office costs, Energeia considered the variance between 2013 actual and approved budget to be inefficient. This was because all five Victorian distributors (including CitiPower and Powercor) experienced the same program delays. CitiPower and Powercor did not incur program office overspends, making them the efficient benchmark by which other businesses should be judged.

We find that AusNet Services' decision to continue with WiMAX from February 2011 was the key reason for management office expenditure, not a change in external conditions. On this basis, we have determined their entire 2013 project management expenditure excess is not prudent or efficient, and therefore will not be added to the building block costs. Our 2012–15 determination set \$6.9 million as the approved budget for this line item; the distributor spent \$11.7 million in that year. We have determined that \$3.6 million (real 2013) is the amount that should be excluded from the building block costs. This is because we have not adopted the consultants five per cent margin.

⁶⁸ AusNet Services, Advanced Metering Infrastructure, 2015 charges revision application, 29 August 2014, p.25.

⁶⁹ And affirmed recently by the Australian Competition Tribunal and Federal Court.

AusNet Services announced to the Australian Stock Exchange that it will be seeking to recover an additional \$175 million for remediation costs to address “issues of instability. The Minister and consumer groups expressed concerns about these additional imposts.⁷⁰ Activities and costs referred to in the disclosure occurred from 2014, and were not proposed for approval and were not assessed as part of the 2013 expenditure excess. If they are submitted by AusNet Services in the next period, they are an issue for our future review and evaluation.

Best Endeavours review by the Essential Services Commission Victoria

We note that the Best Endeavour review by the Essential Services Commission Victoria did not impact in any material way on Energeia’s findings. This is because our assessment process is distinct from the commission’s. Its review was on the five Victorian distributors’ compliance with their best endeavour obligations.

That obligation is assessed based on whether the distributor meets 100 per cent of the AMI meter functionality and service levels and having 90 per cent or more of prescribed customers receiving an AMI meter. Our assessment is focussed on whether distributors’ costs to meet the rollout targets are efficient. If they don’t meet the target, they may incur less expenditure and if they do meet the target they may well incur more expenditure. In either case their costs should be efficient.

Both United Energy and Jemena were considered to have met their best endeavours obligations, even though they did not achieve 100 per cent targets by the required time frame. From our perspective, we still need to be satisfied their costs were efficient in getting to whatever level they achieved. For example, in failing to meet the target, it may be the case they had regard to the much higher levels of cost that this would entail. This would be consistent with a prudent outcome. In the case of AusNet Services, they were considered by the commission not to have met their obligations. From our perspective however, we must be satisfied by that whatever level of compliance was achieved involved efficient and prudent expenditure.

5.3 Amendments to the debt risk premium

We made an error in calculating the weighted average cost of capital for the charges applications last year. This was by inclusion of a pair of Coca Cola Amatil bonds in the paired bond analysis that forms part of the debt risk premium calculation. We have corrected this in the 2015 charges models by removing the offending bonds. This is in line with Jemena’s submission made on this topic.⁷¹

To ensure consistency, we have applied the new WACC of 7.61 per cent to all five distributors regardless of whether they proposed it in their charges applications. The impact of this correction on the 2015 charges is relatively immaterial, all else equal.

⁷⁰ Victorian Minister for Energy and Resources, AMI Charges Revision Applications 2015, 6 October 2014, p. 3.

⁷¹ This is now consistent with how we have always calculated the DRP component.

6 Approved metering charges

The advanced metering infrastructure charges set out in Table 6-1 will apply from 1 January to 31 December 2015. The table compares recent charges and the difference between 2015 proposed and approved charges.

Table 6-1 Historic, current and future charges (\$nominal, excludes GST)

Distributor	Meter type	2013 charges	2014 charges	2015 charges	Variance
					2015 approved vs. proposed (per cent)
CitiPower	Single phase	127.45	116.55	115.90	0.4
	Three phase direct connected meter	166.57	152.33	151.49	0.4
	Three phase CT connected meter	210.39	192.40	191.34	0.4
Powercor	Single phase	127.75	115.27	109.40	0.4
	Three phase direct connected meter	168.50	152.04	144.30	0.4
	Three phase CT connected meter	223.27	201.47	191.55	0.6
Jemena	Single phase single element meter	173.38	193.82	226.32	-2.1
	Single phase single element meter with contactor	173.38	193.82	226.32	-2.1
	Three phase direct connected meter	213.07	238.19	278.12	-2.1
	Three phase current transformer connected meter	236.88	264.81	308.66	-2.3
AusNet Services	Single phase single element	130.45	160.21	205.54	-1.6
	Single phase two element with contactor	149.90	184.10	236.19	-1.6
	Multiphase	181.10	222.42	285.36	-1.6
	Multiphase with contactor	200.89	246.73	316.54	-1.6
	Multiphase current transformer connected	258.68	317.70	407.45	-1.6
United Energy	Single phase single element meter	124.45	141.33	154.51	-3.7
	Single phase single element meter with contactor	124.45	141.33	154.51	-3.7
	Three phase direct connected meter	140.35	159.39	174.25	-3.7
	Three phase current transformer connected meter	149.71	170.02	184.61	-4.4

Source: AER analysis.

7 Manual meter charge

The Victorian government has decided that all customers who make an active, deliberate choice to maintain an accumulation meter instead of receiving a smart meter will be charged an additional fee over and above their AMI charge. The fees set out in this section will be added to the AMI charges set out in Table 6-1 to become the 2015 metering charges for these customers.

Manual meter charge

Responding to the State government order in council gazetted 5 August 2014 (which amends the Order), four of the five network operators have proposed a manual meter reading fee. Clause 14AAB.2(a) sets out that this fee:

- (i) is the same as the distributors' manual special meter read charge; or
- (ii) recovers manual meter costs

Note: manual special meter read charges may have been determined as part of a distributor's distribution determination.

AusNet Services is the only network operator that has chosen to forego charging its customers the fee; given that such customers are required to be charged an additional fee, this will mean AusNet Services will pay these higher costs itself and this will not be recovered from any of its customers.

We recognise that distributors must continue to run legacy meter reading systems and perform manual tasks for the thousands of customers who by choice have retained their accumulation meters. Such systems were to be de-commissioned or become obsolete during early implementation of the AMI rollout. Various changes to the policy landscape since 2010 meant distributors had to maintain those systems and their attendant costs. The Order now gives distributors the right to charge refusal customers an additional fee to pay for those incremental costs.

In a change to current practice, distributors rather than retailers, will directly bill customers for this fee, as per the Order.

Determination

We approve the fees expressed in Table 7-1. We made no changes to the fees proposed because they represent efficient cost and service delivery previously determined by us.

We received a number of submissions from parties that insisted we not approve any charges until the impact on consumers health from smart meters are fully investigated. However, we have no legal discretion to consider this issue in our review. It is a question for Victorian government policy. Our role is to determine the budgets and charges of meter provision—in accordance with the Order.

Many consumer representatives were also opposed to paying any manual meter reading fee. Nevertheless, the Order permits distributors to charge such fees and we do not have discretion to depart from the Order's requirements. As noted above, AusNet Services' customers will not be charged for this service.

We have approved different manual meter fees depending on the type of meter installed at a customer's premises. This is in line with distributors' charging regimes for AMI meters.

Further, we are satisfied that each distributor has excluded the costs of manual meter reads from its AMI building block costs. We were able to do this via a reconciliation of the charges models. This addresses the Minister's and many other stakeholders' concern to ensure distributors do not double recover costs.⁷² Refusal customers therefore bear all the costs of manual meter fees which the Order intends rather than smart meter customers⁷³ and which the Victorian Minister's submission supports.⁷⁴

Those customers will continue to also pay the AMI meter charge, despite not having one. They are also ineligible for compensation from distributors under the government's rebate scheme.⁷⁵

Table 7-1 Manual meter charge for 2015 (\$nominal, excludes GST)

Distributor	Manual meter charge	Proposed manual meter charges	Approved manual meter charges
CitiPower	Per read	19.44	19.44
Powercor	Per read	31.07	31.07
Jemena	Per read	10.83	10.83
AusNet Services	Not applicable	Not applicable	Not applicable
United Energy	Maximum annual charge for basic meter—quarterly field visit	44.20	44.20
United Energy	Maximum annual charge for basic meter—monthly field visit	132.60	132.60
United Energy	Maximum annual charge for interval meter—quarterly field visit	49.12	49.12
United Energy	Maximum annual charge for interval meter—monthly field visit	147.36	147.36

Source: distributors' proposals and AER analysis.

Note: these fees apply from 1 April 2015 to 31 December 2015.

⁷² Victorian Minister for Energy and Resources, AMI charges revision applications 2015, 6 October 2015, p. 13.

⁷³ Clause 14AAB.13.

⁷⁴ Victorian Minister for Energy and Resources, AMI charges revision applications 2015, 6 October 2015, p.13.

⁷⁵ Clause 14AAA.3(b) requires a distributor to pay customers who do not have a logically converted AMI meter \$125. However, this does not apply to individuals who have refused to have an AMI meter installed.

8 Appendix A—relevant legislative requirements

5I.2 In determining the building blocks the Commission must:

- (a) include actual capital expenditure and actual maintenance and operating expenditure for year t–1 where actual Total Opex and Capex for that year:
 - (i) is certified in an audit report under clause 5H.2;
- (b) where year t–1 is the year commencing 1 January 2009 also include the expenditure determined pursuant to clause 5D.4.

Note: An audit report provided for the purposes of this clause is not conclusive as to whether expenditure is for activities that are within scope.

Note: Clause 5D.4 provides for the making of a determination with respect to certain items of expenditure that have been incurred between 1 January 2006 and the Start Date. 5I.7A For the purposes of clause 5I.7, the expenditure excess is prudent where that expenditure excess reasonably reflects the efficient costs of a business providing the Regulated Services.

5I.7B For the purposes of it being satisfied that an expenditure excess reasonably reflects the efficient costs of a business providing the Regulated Services, the Commission may take into account:

- (a) Where the expenditure excess is a contract cost, whether the contract was let in accordance with a competitive tender process; and
- (b) The matters set out in clause 5I.8.

5I.8 The matters that the Commission may take into account include the following:

- (a) the information available to the distributor at the relevant time;
- (b) the nature of the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems;
- (c) the nature of the rollout obligation;
- (d) the state of the technology relevant to the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems;
- (e) the risks inherent in a project of the type involving the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems;
- (f) the market conditions relevant to the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems;
- (g) any metering regulatory obligation or requirement; and
- (h) any other relevant matter.

Note: See clause 14.

5I.9 When taking into account whether a contract was let in accordance with a competitive tender process, the commission must have regard to:

- (a) the tender process for that contract;
- (b) whether there has been compliance with that process; and
- (c) whether the request for tender unreasonably imposed conditions or requirements that prevented or discouraged the submission of any tender that was consistent with the selection criteria.